

INTRODUCTION - PRINCIPLES AND GOALS OF MAINTENANCE PROGRAMMES

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Maintenance activities are based on three fundamental principles which must be assured if a country is to remain free of smallpox and to sustain effective control of measles. They are as follows:

- 1) The accumulation of susceptibles must be prevented by conducting vaccination campaigns aimed at susceptibles, i.e., newborns entering the population since the previous campaign. The timing of maintenance vaccination cycles depends upon a country's policy on measles control:
 - a) If the country is intensively pursuing nationwide measles control, then maintenance vaccination cycles probably must be conducted at intervals no greater than yearly in rural as well as urban areas. These time relationships deserve more evaluation in the field before they can be reduced to dogma.
 - b) In those countries not so intensively pursuing nationwide measles control, the experience in the Ivory Coast, the OCEAC countries and elsewhere suggests that campaigns conducted at three yearly intervals will be adequate to prevent accumulation of sufficient susceptibles to prevent reestablishment of smallpox transmission.
- 2) High levels of coverage must be assured in the target age group through performance of concurrent assessment following maintenance campaign activities.
- 3) Each country must have a functional surveillance system capable of identifying imported smallpox cases and measles outbreaks and capable of rapidly responding to such outbreaks. This is an integral part of maintenance activities.

There are adequate examples now from Ibadan, Bamako, Lagos, Dakar, Douala, Libreville and elsewhere which demonstrate that sufficient susceptibles to permit measles epidemics accrue rapidly. If substantial numbers of susceptibles are not permitted to accumulate, measles control can be a reality. However, before one can seriously discuss maintenance of measles control, we must achieve more effective measles control across broader areas than has been the case to date. As we discuss maintenance immunization activities it is well to bear in mind two points:

- 1) Mass vaccination in maintenance programmes has one characteristic not present in the initial mass campaigns, i.e., a need for stringent selectivity of the target group. Some pilot maintenance projects have already experienced difficulties in limiting the vaccinees to those in the target age group, i.e., those from six months of age to six months older than the interval since the last campaign. Restricting mass campaigns to such a selected target group may demand the evolution of new techniques of information and propaganda and possibly even changes in the basic concepts of mobile field immunization operations.

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- 2) While the importance of smallpox outbreak control and maintenance of smallpox eradication is well appreciated, the role of measles outbreak control has yet to be defined adequately. It would appear from limited experience that prompt response to measles outbreaks may, in fact, be fundamental to achieving effective measles control. Because of the high contact transmission rate of measles, explosive outbreaks are the rule and, to be successful, "firefighting" techniques will have to be appropriately rapid.